

COVID-19 Vaccinations: Best Practices for FQHCs

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Background

This project was completed with Better Health Partnership, a multi-stakeholder Health Care Improvement Collaborative. Members are committed to transforming healthcare to achieve better care, better health, and lower costs. Better Health Partnership is located within MetroHealth Medical Center, at 2500 MetroHealth Drive, Cleveland, OH 44109.

Population

The population served for this project included individuals in Cuyahoga County. Specifically, individuals in the City of Cleveland and the suburbs of Cuyahoga County were studied, as well as the racial make-up of the population.

Learning Objectives

The objectives of this practicum included explaining and clarifying ideas and concepts regarding vaccine policies to respective hospitals, Federally Qualified Health Centers (FQHC), and other stakeholders; appraise, evaluate, and critique current vaccine policies; and analyze and draw connections between federal, state, and county level legislature to determine commonalities and best practices.

Activities

Research was conducted in order to provide members with appropriate information regarding vaccine policy roll-out. This was done through weekly meetings with FQHCs and Health Center Leadership (FQHCs, Hospitals and other Stakeholders) meetings. Additional research was conducted based on the needs of the members of these meetings. As vaccine roll-out began, working at different types of vaccine clinics was also done to see variations first hand.

Deliverables

Three presentations were given during weekly meetings, including topics on Biden's federal policy update, best practices in vaccine equity, and an analysis on vaccine data in Cuyahoga County. Two hand-outs were also made regarding policy changes and policy recommendations.

Introduction

As we know, with the 2019 Coronavirus outbreak, roles of the environment and human behaviors have emphasized inequalities that continue to persist. CDC recommendations have emphasized the exception of essential workers, who have been more likely to be African American and approximately 70% did not have a college degree. As a result, this project aims to look at the vaccination rates in Cuyahoga County based on region and race to see what practices work best for FQHCs in order to improve equity in distribution.

Methods of Evaluation

OBSERVATION

Vaccination numbers for FQHCs from January through now

STUDY

Retrospective study

DATA

Data was provided by BHP and sample FQHCs

HYPOTHESIS

FQHCs can provide more equitable distribution of vaccines through pop-up clinics

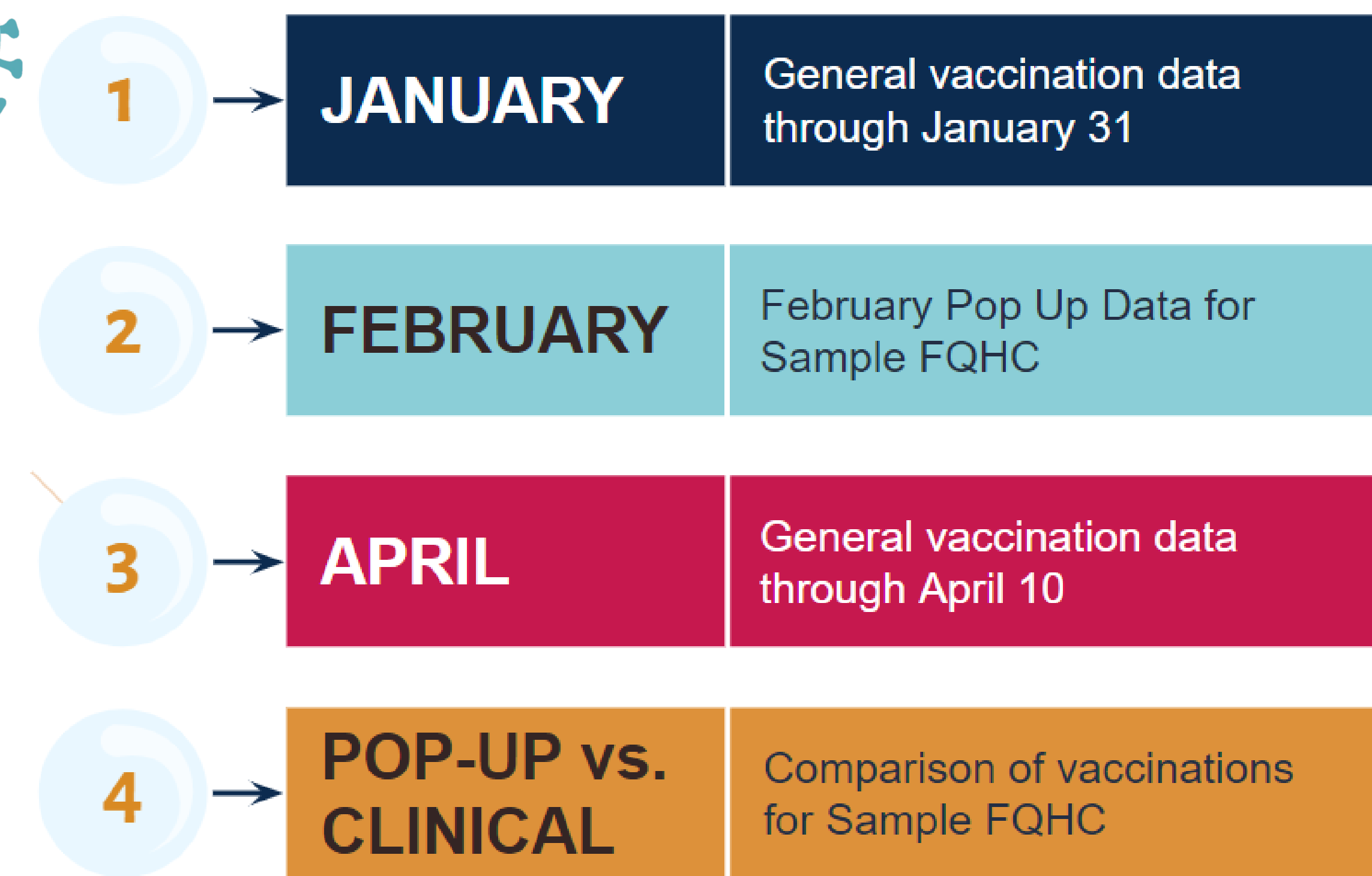
EXPERIMENTATION

Changes in vaccination distribution among race and between cities and suburbs

ANALYSIS METHOD

SPSS Statistics 27

Datasets



Chi Square Analysis

Before comparing data between vaccinations and regions, chi-square tests were used to look at the relationship between the region (city vs. suburb) and the variables of percentage non-white population, the average income range, and housing density. Chi-square tests were completed for each of these, and the calculated p-values were all 0.000. This shows that the tests were highly significant, meaning an association between region and each of the variables can be concluded. As a result, looking at vaccinations by region is significant when identifying disparities for vaccinations.

Vaccination Data by Region

REGION	VACCINATIONS (ALL)			POPULATION
	% THROUGH 1.31	% POP-UP IN FEBRUARY	% THROUGH 4.10	% OF WHOLE
CITY	25.94%	19.11%	35.91%	29.41%
SUBURB	74.06%	80.89%	64.09%	70.59%
TOTAL	100.00%	100.00%	100.00%	100.00%

Table 1. Vaccinations for Cuyahoga County, based on Region

REGION	VACCINATIONS (SAMPLE FQHC)				POPULATION
	POP-UPS		CLINICAL SITES		CUYAHOGA COUNTY
	FREQUENCY	PERCENT	FREQUENCY	PERCENT	PERCENT
CITY	351	31.48%	1,716	27.47%	29.41%
SUBURB	764	68.52%	4,531	72.53%	70.59%
TOTAL	1115	100.00%	6,247	100.00%	100.00%

Table 2. Vaccinations for a Sample FQHC Comparing Pop-Up and Clinical Sites, based on Region

Vaccination Data by Race

RACE	VACCINATIONS (ALL)			POPULATION
	% THROUGH 1.31	% POP-UP IN FEBRUARY	% THROUGH 4.10	%
BLACK	9.62%	91.67%	25.34%	30.50%
WHITE	79.57%	6.16%	67.20%	63.50%
OTHER	0.48%	0.00%	0.36%	N/A
ASIAN	2.47%	0.36%	3.57%	0.40%
UNKNOWN	7.63%	1.81%	3.26%	3%
AMERICAN INDIAN	0.15%	0.00%	0.20%	0.30%
PACIFIC ISLANDER	0.07%	0.00%	0.06%	N/A
MULTIRACIAL	0.00%	0.00%	0.01%	2.30%

Table 3. Vaccinations for Cuyahoga County, based on Race

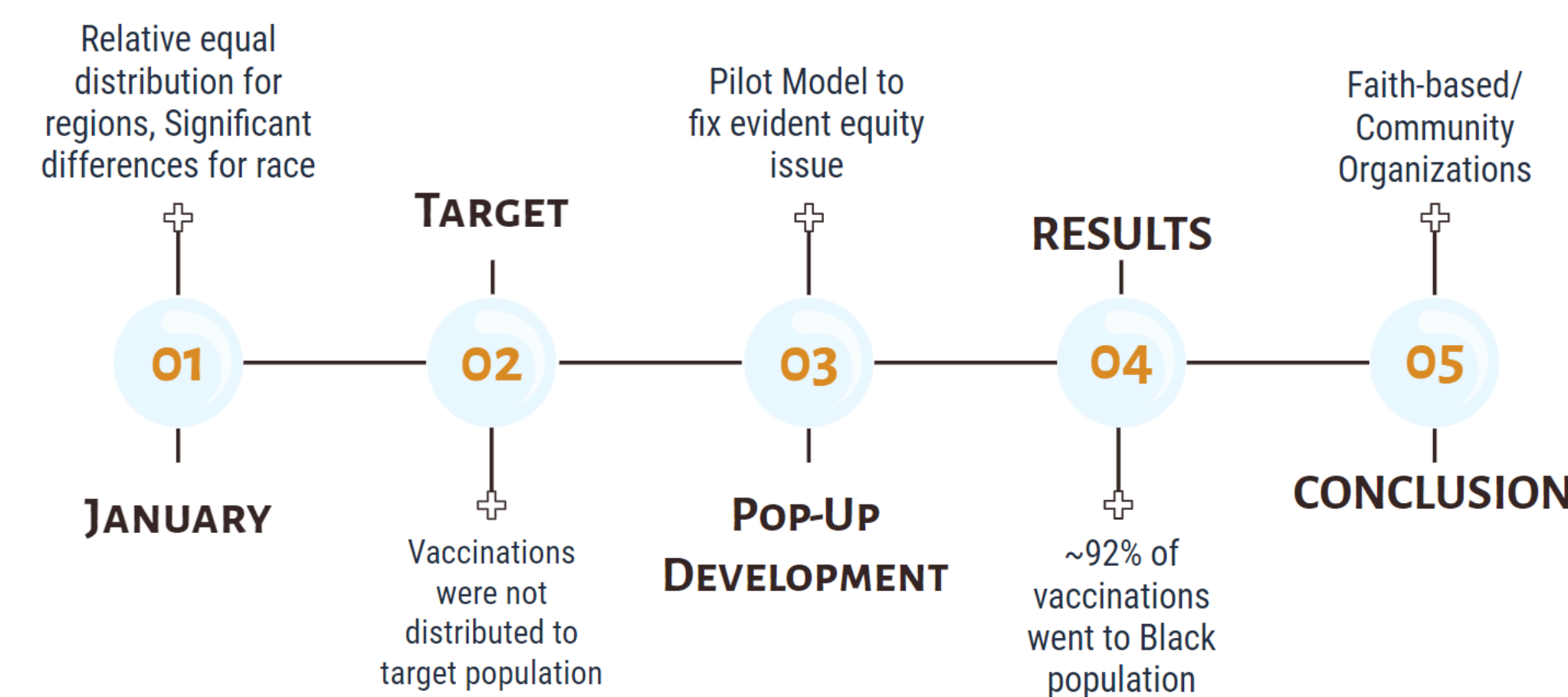
RACE	VACCINATIONS (SAMPLE FQHC)				POPULATION
	POP-UP		CLINICAL SITES		CUYAHOGA COUNTY
	FREQ	%	FREQ	%	%
BLACK	765	68.61%	1,626	25.85%	30.50%
WHITE	293	26.28%	4,321	68.69%	63.50%
OTHER	0	0.00%	39	0.62%	N/A
ASIAN	14	1.26%	217	3.45%	0.40%
UNKNOWN	43	3.86%	77	1.22%	3%
AMERICAN INDIAN	0	0.00%	5	0.08%	0.30%
PACIFIC ISLANDER	0	0.00%	6	0.10%	N/A
MULTIRACIAL	0	0.00%	0	0.00%	2.30%

Table 4. Vaccinations for a Sample FQHC Comparing Pop-Up and Clinical Sites, based on Race

Analysis

We compare the two sets of data we have to see the impact that pop-up vaccinations made in terms of equity of vaccinations. First, when we look at vaccinations for Cuyahoga County as a whole, Table 1 shows that the distribution of vaccinations between suburbs and the City of Cleveland did not vary greatly. However, when we look at vaccinations based on race, we can see that after February, the distribution of vaccinations is much more equitable by race. To see if the February implementation of Pop-Ups directly affected the vaccination rates, we looked at data specifically from a sample FQHC to compare vaccinations from their Pop-Up sites to their Clinical sites. Similarly, we can conclude that the distribution of vaccinations is similar by region, but drastically different based on race. As a result, we can see that vaccination equity is attributable to Pop-Up sites.

Vaccination Timeline



Limitations

This study was conducted using data from one sample FQHC, and thus may not represent all of the FQHCs in Cuyahoga County. Furthermore, data for race and population may be incomplete, since race is often left blank on vaccination forms and population is often incomplete due to the nature of census data.

Public Health Implications

Over the past four months, a number of developments have occurred on the front of vaccines and vaccination sites. While efforts have been made to improve equity in vaccinations across the county, it is evident that racial disparity is still a major concern when it comes to public health efforts and more policy efforts are necessary to ensure equity. Furthermore, pop-up vaccinations are one of many efforts that FQHCs have put forth to address disparities in vaccinations. Other FQHCs, for example, have focused on connecting their patients with mass vaccination sites to improve overall vaccination rates.

